El médico general desde la perspectiva sociomédica, un cambio de paradigma en el diseño curricular por competencias.

The general practitioner from the medical-social perspective, a paradigm shift in competency-based curriculum design.

Martina Patricia Flores-Saucedo
Universidad Juárez del Estado de Durango
marflor62@yahoo.com

Laura Ernestina Barragán-Ledesma
Universidad Juárez del Estado de Durango
habil_laura@yahoo.com.mx

Resumen

La investigación se propuso conocer: el nivel de competencias profesionales que auto refieren los médicos generales en formación, la valoración que hacen del proceso educativo de calidad que los forma, que tanto saben acerca del programa de la OMS "Objetivos de Desarrollo del Milenio"; con la información recuperada contribuir a orientar el proyecto: Desarrollo curricular por competencias del programa educativo de médico cirujano en las Facultades de Medicina de la Universidad Juárez del Estado de Durango.

El instrumento se construye con 160 variables ordinales; tres signalícticas, a partir de los 60 objetivos de aprendizaje de los médicos generales, definidos por el IIME; se aplica un censo a 248 sujetos pertenecientes al Décimo Semestre y a los que presentan el examen EGEL-CENEVAL, durante el semestre "A" 2007, de las Facultades de Medicina de Durango y Gómez Palacio, de la UJED y de la Universidad Autónoma de Zacatecas.

Palabras Clave: Educación Médica, Competencias Profesionales-Médicos Generales. Diseño Curricular. Sociomedicina. Objetivos Desarrollo Milenio.

Abstract

The research was proposed to meet: the level of professional competencies that require the general practitioners in training, the assessment they made of the quality educational process forming them, how much they know about the "Millennium Development Goals"; with information recovered to help guide the project: competency-based curriculum development of the educational programme of medical surgeon in the Faculties of Medicine of Juárez University of Durango State.

The instrument is built with 160 ordinal variables; three signalistics, from 60 learning objectives of general practitioners, defined by the IIME (Institute for International Medical Education); applies a census to 248 subjects belonging to the tenth semester and those with EGEL-CENEVAL examination, during the semester "a" 2007, the Faculties of Medicine of Durango and Gomez Palacio, the UJED and the Autonomous University of Zacatecas.

Key Words: medical education, Professional competencies, curriculum design, social medicine, millennium development goals.

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Introduction

While there are various instruments at the national and international levels to explore profile of the general practitioner in formation, in this research were taken as base sixty learning objectives, located in seven domains, defined by the Core Committee of the International Institute for Medical Education, IIME1 in a project developed from 1999 to 2006, multicentre, multinational, transdisciplinary, that has served as a valuable guide for each country to build its own competency framework based on a proposal that agrees feel international in this area, then identifies the domains and the number of competencies that integrate them.

Table 1. Professional competencies IMEE

Eje Uno	International Institute for Medical Education	No. Competencias
Siete	Professional Competencies of General Practitioners	60
A	domains	11
B	Professional, attitudes, behaviors and ethical values	10
C	Scientific Foundations of Medicine	09
D	Communication Skills	10
E	Clinical skills	09
F	Health Systems and Public Health	05
G	Access and Use of Information	06

So the project Alfa Tuning America Latina is about the specific skills in medicine. 2 It is defined that at the end of the studies of medicine graduates must have capacity to develop sixty-three specifically certain professional skills for this profession, which are distributed in ten areas of specific domain.

Table 2. Powers Alfa Tuning for General Practitioners

1	Ability to conduct clinical practice.
2	Ability to provide emergency medical care.
3	Ability to prescribe medication.
4	Ability to communicate in their Professional Practice.
5	Ability to Perform Diagnostic and Therapeutic Procedures.
6	Ability to Identify Determinants in Health-Disease Process.
7	Capacity for the Use of Evidence in Medical Practice.
8	Capacity for the Use of Information and Technology Effectively In a Medical Context
9	Ability to Implement Ethical and Legal Principles into Practice of Medicine.
10	Ability to Work Effectively in Health Systems.

However, it is important to note that the above documents were part of those who worked the Mexican Association of Colleges and Schools of Medicine, AMFEM, in the definition of the Mexican GP, which was presented and approved at national profile 09 April 2008 in the so-called Declaration of Zacatecas. Document is a reference basis for curriculum development work by competence in updating curricula that train general

practitioners in our country in the twenty-first century, and should show ability and competitiveness within an international context.

Table 3. Competence of general practitioners AMFEM

EJE UNO	AMFEM Competencias del Medico General Mexicano	No. Comp
Siete	Domains	32
A	Generic Competition 1. Domain general medical care.	7
B	2. Domain generic competition the scientific basis of medicine.	4
C	Generic competition 3. methodological and instrumental ability in the sciences and humanities.	8
D	4. Generic Domain ethical competence and professionalism.	5
E	5. Domain generic competition quality of care and teamwork.	3
F	6. Competition generic domain of community care.	2
G	7. Ability generic competition for participation in the health system.	3

From document Imee the instrument applied in this research was developed, allowing us to contextualize and project the results to assist in the construction of the new curriculum for the degree in general medicine of the Faculty of Medicine of the Universidad Juarez del Estado Durango.

To go putting us in our field of specific action, and to define here as we understand the term curriculum; find a well-structured free online encyclopedia, Wikipedia response.
A curriculum is the singular meaning in Spanish from Latin curriculum. In plural curricula. In Mexico the term originally Curriculum, changed the term from Anglo-Saxon culture was used. Refers to the set of core competencies, objectives, content, methodology and evaluation criteria that students must achieve a certain level of education.
In general, the curriculum answered questions what to teach ?, how ?, when teaching teach? And what, how and when to evaluate? The curriculum in the educational sense, design can plan academic activities. By building the institution plasma curricular conception of education.

Thus, the curriculum allows forecasting the things we have to do to enable the training of students. The concept curriculum or curriculum (Latin term, accented by being accepted in Spanish) now no longer refers only to the formal structure of the plans and programs of study; but all that is at stake both in the classroom and at school.
Now, what is the curriculum applied competency in training general practitioners ?.

Víctor José Luis Rubalcaba and Ortigosa, in his article Why a resume competency? conceptualize, citing other experts, the issue before us in relation to medical training, as follows:
The purpose of schools and medical schools is to prepare physicians work properly in solving health problems that afflict society, which implies responsibility to influence both the circumstances and the conditions in which this practice is carried out professional.
To fulfill this task, it is necessary that curriculum planning an intricate web of relationships among which the most important are is conjugated: the social and economic structure, characteristics of medical practice, the prevailing policies in Medical Training and materials, physical and technological resources.
An important part of this process is that the general objectives and the educational profile matching the occupational profile of trained doctor and also define the educational methodology that favors the graduate effectively as possible is ideal for a medical practice that meets the needs of society.
Once fixed external concepts, we focus on our school, attending certain guidelines in the educational model of the UJED

The role of the educational model is specific, in pedagogical terms, the educational paradigms that Universidad Juarez del Estado de Durango professes generating an ideal representation of the training process. The educational model should serve as a reference to the functions of teaching, research, extension, linking and services that higher academic institution must provide in order to respond to the social order.

The educational model of the UJED is inspired by an educational paradigm that has to understand the teaching and academic events. This paradigm builds on the

educational task of educating youth, beyond the conception that the student is a mere receptacle of knowledge. So you want the accent based education teaching move to one that focuses its activities in the learning process.

The UJED, through educational model, share with UNESCO the need to stimulate a truly comprehensive education, and this is given to the extent to which the student: learning to learn, to know, to do, to live with others and be (Delors, 1996). To acquire knowledge from himself, that the teacher be a guide or companion of the learning process, leading students to be independent in knowledge management, responsible, free, critical, creative and able to live in society.

This will result in a concrete methodology and practices specific lines of training in educational processes in an environment of learning manager truly knowing, doing, living together and being of the student.

The characteristics required curriculum design UJED depending on the requirements defined by the educational model and the new organizational and academic structure, are:

Flexibility in space, time and content
Decreased workload
Mobility and internationalization.
System credits.
Community engagement and non-traditional learning space
Curricular and institutional evaluation
Experience receptional
The social service and educational experience that allows students
give back to society what it has given through education,
enabling the social relevance of the acquired knowledge.
A graduate profile involving a comprehensive education.

Because of its importance, we can not fail to consider the Mexican Council for Accreditation of Medical Education, COMAEM in its 2008 edition, which refers to the standards and evaluation indicators for the accreditation of the curriculum of the degree in medicine.

While all assessment indicators are seventy-nine considering seven chapters review, here only board that have a direct connection with curriculum planning, ie with which are verified when analyzing the quality of the curriculum and are part of Chapter II.

Allocation System and Credit Transfer SATCA: To meet the indication of incorporating credits, the document issued by the Ministry of Education was revised
Within which is said to promote a common language, academic credit operationally defined as the unit of measure of the academic work of the student and curricular flexibility and the possibility to have curricula that allow choice of content, elasticity in the time to complete, through different learning modalities, are also the possibility that curriculum developers and teachers modify content for an expedited update.

Table 4.- Criteria for allocation of credits SATCA in Mexico

Tipo	Ejemplos de actividad	Criterio
teaching; Instruction front group theoretical, practical, distance or mixed mode. Classes, laboratories, seminars, workshops, online courses etc.	teaching; Instruction front group theoretical, practical, distance or mixed mode. Classes, laboratories, seminars, workshops, online courses etc.	teaching; Instruction front group theoretical, practical, distance or mixed mode. Classes, laboratories, seminars, workshops, online courses etc.
16 hrs. = 1 credit.	16 hrs. = 1 credit.	16 hrs. = 1 credit.
Work supervised professional field. Stays, assistantships, internships, community service, internships, learning stays summers of research, etc.	Work supervised professional field. Stays, assistantships, internships, community service, internships, learning stays summers of research, etc.	Work supervised professional field. Stays, assistantships, internships, community service, internships, learning stays summers of research, etc.

Table 5. Assignment of receivables Education Level

Nivel:	Créditos
APO or university higher technical	75 a 120
Bachelor Degree	180 a 280
I graduate:	
specialty	40 a 60
Masters	80 a 120
doctorates	120 a 180*

Securities aligned to other systems of credit allocation at national and international level.

CONCENTRADO CONTEXTO DEL DISEÑO CURRICULAR POR COMPETENCIAS					
UNESCO 1998	BOLONIA UE 1999	BOLONIA ALC 2002	TUNING UE 2001	TUNING ALC 2003	ELEMENTOS DISEÑO CURRICULAR
Paris Sorbonne Declaration on Improving Higher Education 25 May 1998 Paris: UNESCO Declaration on Education of the XXI Century 26 October 1998	19 June 1999 Bologna Declaration for the creation of the European Higher Education Area. Monitoring Meetings: Prague 2001 Berlin 2003 Bergen 2005 London 2007 Belgium 2009 scheduled: Austria 2011	May 2002 at the Meeting of Cordova Spain, the Common Space of Higher Education in Latin America and the Caribbean is created. UEALC Began its activities in South America, through supranational academic networks. His actions manifest mainly in: Evaluation, Mobility and Accreditation. Follow-up meetings: Salamanca 2005 Montevideo 2006	A__Refine in the musical sense structures and educational programs on the basis of diversity and autonomy: a project by and for universities. Lines of Action: Generic Skills. Competitions specific ECTS (European Credit Transfer System). Approach to the Teaching Learning and Assessment. quality	Refine in the musical sense structures and educational programs on the basis of diversity and autonomy: a project by and for universities. Intercontinental project was born in Cordova, Spain. Declaration of Compostela 2004 (unified methodology for Europe and America) Follow-up meetings: April-June 2005 Buenos Aires, Argentina August 2005 Belo Horizonte, Brazil February 2006 San José de Costa Rica June 2006 Brussels, Belgium Joint Meeting Europe-Latin America and the Caribbean. February 2007 Cd. De Mexico, Mexico. Comp. Gen. and Eng. X DISCIPLI. credits accreditation mobility	Guidelines and regulatory framework: UJED AMFEM (Brand national guidelines) COMAEM (Accrediting Agency) ECOES * (Common Space of Mexican Higher Education) CUMEX * (Consortium Mexican Universities Quality) * Unified Strategic Programs: Comparability of PE; Mobility Students and Scholars; internationalization) Professional Skills medico General IIME 2006 TUNING ALC 2007 AMFEM 2008 Academic Credit System Tepic 1972 Agreement 279 2000 SATCA_ SEP-ANUIES-CUMEX 2007 Educational and Academic Model: UJED 2006

				Medicine 2006-2007	

The other point included in this research is the program of the World Health Organization, the Millennium Development Goals.

In September 2000, the largest gathering of heads of state in history, the adoption of the Millennium Declaration of the United Nations marked the beginning of the new millennium. Signed by 189 countries, led to a roadmap in which targets are set to achieve by 2015.

The eight Millennium Development Goals are based on agreements made at United Nations conferences held in the 1990s and represent commitments to reduce poverty and hunger and to tackle ill health, gender inequality, education, lack of access to clean water, degradation of the environment and sustainable human development, among other important aspects.

The Millennium Development Goals are formulated as a covenant in which the contribution they can make developed countries through trade is recognized, development assistance, alleviating the debt burden, access to essential medicines and technology transfer.

Millennium Development Goals are:

Goal 1 - Eradicate extreme poverty and hunger

Goal 2 - Achieve universal primary education

Goal 3 - Promote gender equality and empower women

Goal 4 - Reduce child mortality

Goal 5 - Improve maternal health

Goal 6 - Combat HIV / AIDS, malaria and other diseases

Goal 7 - Ensure environmental sustainability

Goal 8 - Develop a global partnership for development

Considered here, since they have an undeniable connection with the health of populations from the aspects, not only biological but psychological and social dimensions that are essential to the practice of medicine, particularly if we are talking about the formation of physicians social responsibility.

DEVELOPMENT:

Within the curriculum framework for medical training, training three essential axes are: the so-called basic sciences, which provide the scientific basis of medicine and given the context of what and why do; call the clinical sciences, which are the disciplinary framework and give the context of how and when to do; and sociomedical sciences calls that give the context for those who do and within which explicitly integrate the values in the act of general practitioners and public health.

It is necessary to analyze whether general practitioners how scientific and clinical pace in a socially responsible response competition; and if it relates to the training process they receive, with international educational dynamics, with the general practitioner

acting as an agent of social change, especially from the field of public health, and linking that as healthcare has with the proposed action generated by WHO called Millennium Development Goals MDGs.

The adoption of the system of professional skills to identify levels of scientific competence and clinical socially responsible and responsive to the demands of population health in the twenty-first century, considering the biological, psychological, sociological, and cultural diversity , depending on the context in which an individual or a community develops, supports various methodologies and academic models, so a satisfactory alternative in the draft design of a new curriculum for a career in medicine was considered in the two faculties serving this area discipline in the Universidad Juarez del Estado de Durango, therefore, knowledge of skills that self refer GPs in training is strategic as well as visualization of international trends in medical education and approach to public health perspective from an international program such as the Millennium Development Goals WHO.

The human resources trained as general practitioners, reflect on your professional performance, cognitive components, aptitude and attitude that has received through both explicit and hidden curriculum of the institution that gives higher education.

The proposed paradigm is that a general practitioner, socially responsible, competent to intervene effectively in the field of public health, is a person with values, academically trained with recognized quality, especially in its clinical and communication skills.

To work with him, a major question arises: Is there a value chain between self-reported skills of general practitioners in training, curriculum the way the cognitive, in aptitudes and attitudes and their responsiveness not only scientifically and clinically competent, but with a sense of social responsibility in favor of the applicants communities of medical services?

We also work with a central hypothesis: Hi = The competent response, and socially responsible GPs to intervene effectively in the field of public health, if it is determined

by its values and the quality of academic training they receive, particularly in clinical and socio area.

And with a comparative hypothesis: Hi = The competent and socially responsible response to general practitioners to intervene effectively in the field of public health, determined by its values, the quality of academic training they receive, particularly in the clinical area and sociomedical, is significantly different between women and men; between students and tenth semester students EGEL; and among students in the three participating faculties in research: Durango, Gómez Palacio and Zacatecas.

On the above basis, the following target was raised:

Identify the skills self referred by general practitioners in training, Faculties of Medicine, Universidad Juarez del Estado de Durango at their headquarters Durango and Gomez Palacio and the Autonomous University of Zacatecas, considering three main aspects:

Identify medical skills based on self-referencing sixty learning objectives defined by the International Institute for Medical Education IIME in 2006; contextualize those defined in Latin America in 2007, by the Project Alpha Tuning and nationally in 2008 by the Mexican Association of Colleges and Schools of Medicine AMFEM.

Identify the assessment have about their training in a quality educational program.

Identify knowledge of an international program called Millennium Development Goals implemented by the World Health Organization WHO since 2000, and whose central focus attention to vulnerable groups, from different perspectives.

With the above three aspects, was intended to reference the results to assist in the construction of a proposed curriculum design skills of undergraduate Surgeon educational program, with special attention to the strengthening of sociomedical axis of which is its vertebral column public health.

To conduct this research, an instrument that considers three axes, a total of one hundred sixty three simple variables was designed, which were defined as follows:

The first axis, based on the professional skills of general practitioners, is constructed on the basis of sixty learning objectives defined at the international level, the

International Institute for Medical Education IIME, which are broken down into seven domain areas that integrate percent forty nine simple ordinal variables.

The second axis, based on the educational process and context of curriculum design skills, consider five simple ordinal variables, exploring some essential points realtivos the quality of the curriculum.

The third axis, based on the program called "Millennium Development Goals", considers six simple ordinal variables, exploring some general aspects of this international program with implications in the area of health.

Sex: signalícticas three variables are considered only male and female; degree, to identify if they tenth semester students or those with the EGEL-CENEVAL, and finally the power source to identify whether they correspond to Durango, Gómez Palacio or Zacatecas. All three have nominal measurement.

The reliability of the instrument using the Alpha Cronbacks was 0.972344 in piloting; and 0.989702 of the whole database.

EL instrument was applied through a census, of which the most significant data are presented: recover 248 of 276 probable instruments in five working groups: two of the Faculty of Medicine Durango, two of the Faculty of Medicine Gómez Palacio, the Universidad Juarez del Estado de Durango; and one of the Faculty of Medicine of the Autonomous University of Zacatecas.

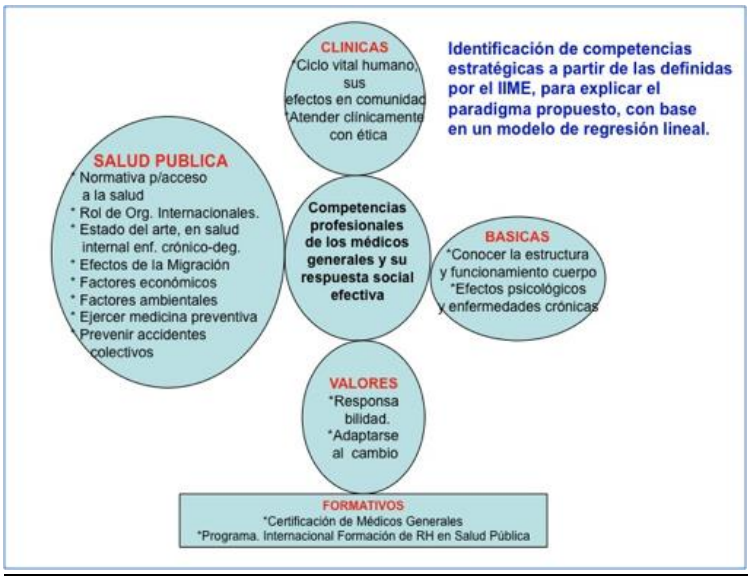
We worked with the application of descriptive statistics: measures of central tendency; integrational: factors and clusters; comparative: T test and ANOVA; and correlation: pearson correlation coefficient and regression.

RESULTS:

The skills that relate auto participants in the study are considered "good" to have a higher score less than eight and nine in seven of the nine subgroups analyzed: Professional values, attitudes, behaviors and ethics; Scientific Bases of Medicine; Communication Skills; Clinical Skills; Access and Use of Information; Critical Thinking; Educational Quality Process; with the exception of Public Health in which a grade of "regular" rating 7.19 is obtained; and what corresponding to the Millennium Development Goals obtained a rating of "very bad competition" rating of 4.50.

The factors that best explain the proposed paradigm are: Public Health, Values, Clinical Skills, Communication Skills and Educational Quality Process. In which self refer competencies considered as "good"; three of these four are central to sociomedical axis; a is a shaft itself; and the other is the foundation of a learning process supported by a quality program.

Linear Regression shows the following model:



No significant differences between the powers autorefieren women and men, students EGEL tenth and students and among students in the three participating faculties: Durango, Gómez Palacio and Zacatecas.

CONCLUSIONS:

The professional skills of general practitioners defined by the International Institute for Medical Education, manifest as attended with a good rating except for the area of public health in which the qualification is regular; five areas are as accurate strengthened to achieve a socially responsible response by general practitioners: Public Health, Values, Clinical Skills, Communication Skills and be supported in an Educational Quality Process.

In proposed curricula of medical education is met with regional, national, and institutional, as derived from the sources consulted international trends.

With regard to the professional skills of general practitioners are inconsistencies between what was stated at the international level by the International Institute for Medical Education, at the regional level for Latin America by the Project Alpha Tuning and nationally by the Mexican Association of Colleges and Schools Medical, although each individual makes integrations in general are considered sixties learning objectives considered essential minimum in the training of general practitioners.

In relation to the generic and specific educational trends in medical education from international to institutional met, ie the renewal process and quality started from the declaration of the Sorbonne in 1998, the UNESCO Declaration 1998 the Bologna Process 1999, the methodology Tuning Europe, Tuning Latin America Project Alpha, the national contextualization with the Declaration of ANUIES, SEP policies through evaluative bodies and acreditaras as COPAES, COMAEM, CIEES, the integration, quality and coverage as ECOES and ECOESAD to the commissioning of policies and programs competency mapping credits; much as those establishing their own institutional frameworks of each university such as the UJED and guidelines established its flexible, consistent, comparable, relevant, and quality to interact on the stage of higher education in the country's educational model.

With regard to the Millennium Development Goals as a program promoted by WHO since 2000, and seeks international attention to specific problems such as: combating extreme poverty and hunger; achieving universal primary; achieving gender equality;

reducing child mortality, improving maternal health, achieving environmental sustainability and achieve strategic partnerships for development.

All actions whose primary point of care for vulnerable communities and whose care would mean an improvement in the quality of life of these populations, especially from the perspective of public health, we can settle that unfortunately is an unknown program for a sector that should support their processes of implementation and operation at basic levels, ie general practitioners in training are unaware in general terms and therefore are not competent to initiate actions of professional support from their natural environments of work, doing this that it retards achieving the goals set and the minimum indicators showing progress and improvement in social areas identified are not met.

Proposals for Action, Change and Transformation.

It was proposed in the new curriculum of the career of surgeon (general medicine) UJED, strengthening the sociomedical axis considering it as your spine the subeje of public health; include methodological subeje where are the tooling skills, and explicitly, learning units that deal with human values in acting physician.

It is proposed to maintain the quality and weight of clinical axis as it is fundamental in professional development. And maintain accreditation of the educational program; and track building programs academic content, respecting the value chains that exist between them, to ensure consistency and coherence throughout the program.

The proposal was made to replicate the research with the latest generation program 1996 and the first of the new curriculum approved in 2010, to assess the educational impact of the program, this will mean working with generational cohorts semester "A" and " B "2010.

The change we set out to achieve was to increase the specific gravity of sociomedical shaft structure it logical, coherent and consistent manner to give the human and social sense demanded by the practice of medicine.

The transformation to achieve in the medium term, form a medical professional who besides being scientifically and clinically competent, has a response rate socially responsible to intervene effectively in the field of public health.

The contribution was achieved with this research, was a stronger and better structured sociomedical axis in the new unified curriculum of the Faculty of Medicine of the Universidad Juarez del Estado de Durango, Durango and Gomez Palacio sites.

A summary table of the main features that the curriculum was structured is presented.

EJES CURRICULARES	Unidades de Aprendizaje	100.00% Resumen General de la Conformación del Programa Educativo de Medico Cirujano: Atendiendo a los Ejes de Formación Académica.
Ciencias Básicas	16	26.16% Horas 1632 Créditos 102 (31.39%) 1/16
Ciencias Socio Médicas **	16	21.54% Horas 0896 Créditos 56 (17.23%) 1/16
Sello y Metodológico**	09	Horas 448 Créditos 28 (08.61%) 1/16
Ciencias Clínico – Quirúrgicas.	39	35.66% Horas 2224 Créditos 139 (42.77%) 1/16
	80	83.36 %U. A. 80 Horas 5200 Créditos 325 SATCA
Materias Optativas	02	1.02% Horas 64 Créditos 4 1/16
Actividades de Formación Integral * + Electiva	07 Conforme a Catálogo 01	3.84% Horas 260 Créditos 13 1/20 Horas 32 Créditos 02 1/16
Idiomas (Inglés)	10	4.10% Horas 320 Créditos 16 1/20
Subtotal	100	92.32% U.A. 100 Horas 5876 Créditos 360 SATCA
Internado		2.56% Horas 500 Créditos 10 1/50
Servicio Social		2.56% Horas 500 Créditos 10 1/50
Experiencia Recepcional		2.56% Créditos 10 1/20
Total		100.00% Horas 6876 Créditos 390 SATCA U.A. 100

This agreed and accepted by the academic plants of the two medical schools, curricular proposal achieves a considerable increase in the weighted weight of sociomedical axis

going from 12% it had in the previous curriculum, to 28.97% in this new curriculum design skills, with a socio-medical approach, which also meets the requirements established in the educational model of the university.

The Sociomedical of this curriculum proposal integrates Axis strictly for 25 learning units, with 1344 hours, 84 credits SATCA, a weighted weight of 25.84%, considering only among the three main training areas: Basic Sciences, Clinical Sciences and Sociomedical Sciences ; of the total of the proposed curriculum has a weight of 21.54%. strategic and comprises three sub-themes: Methodological and Tooling (9 ua); The Public Health composed of seven, since linking to it the two units of learning family medicine (7 ua); The Social, (9 ua); Includes themes: English Language (10 ua); Comprehensive Training Activities, (7 ua).

In relation to the total of the proposed curriculum consists of fourteen semesters, mention may be considered in this axis, forty-two hundred units of learning; thousand nine hundred and twenty-four hours of six thousand eight hundred seventy-six considered, and one hundred thirteen credits SATCA three hundred and ninety; this represents on display and integrated, the 28.97% of the total estimated workload for the training of general practitioners under the current rules and guidelines institutional scholars Universidad Juarez del Estado de Durango.

This is a curriculum for the training of general practitioners for professional skills and a socio-medical approach, helping doctors who are scientifically and clinically competent to form, as well as socially responsible

Attached as pages in landscape format Curriculum Career Surgeon approved March 23, 2010 by the Board of the Universidad Juarez del Estado de Durango, and some of its basic points are detailed.

General Purpose of Curriculum Education Program Surgeon UJED:

The skills that students in the Education Program Surgeon should acquire during their training at the undergraduate level, according to the characteristics of a human resource formed with high quality, include: knowledge and integration of basic science, clinical and surgical, and socio-medical, in which we consider the methodological scientist; giving pride of place to the medical ethics and public health and promotes the development of skills for the generation of new knowledge through cross-disciplinary and multi-sectoral work; encouraging the optimality of their communication skills; effective use of ICTs as natural instruments of their professional work; and incorporating strategies for self-directed learning under the philosophy of lifelong learning.

In its development were considered the contributions derived from the results of research, in particular those related to the aforementioned skills car that had a direct impact in shaping the sociomedical axis to achieve better quality and academic balance and discipline thereof .

MATRIZ DE CORRELACIÓN AREAS DE ORGANIZACIÓN DEL MODELO EDUCATIVO Y EJES DE FORMACIÓN ACADÉMICA DEL PROGRAMA EDUCATIVO MEDICO CIRUJANO													
1º Ciclo	2º Ciclo	3º Ciclo	4º Ciclo	5º Ciclo	6º Ciclo	7º Ciclo	8º Ciclo	9º Ciclo	10º Ciclo	11º Ciclo	12º Ciclo	13º Ciclo	14º Ciclo
Anatomía Humana y Disecciones I	Anatomía Humana y Disecciones II	Fisiología y Prácticas de Laboratorio I	Fisiología y Prácticas de Laboratorio II	Patología y Prácticas de Laboratorio	Endocrinología	Hematología	Salud Mental I	Pediatría I	Pediatría II	Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social
Citología e Histología y Prácticas de Laboratorio I	Citología e Histología y Prácticas de Laboratorio II	Microbiología Parasitología y Prácticas de Laboratorio (M,V,M,B,P)	Farmacología y Prácticas de Laboratorio I	Farmacología y Prácticas de Laboratorio II	Músculo – Esquelético I	Músculo – Esquelético II	Otorrinolaringología	Ginecología y Obstetricia I	Ginecología y Obstetricia II	Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social
Bioquímica y Prácticas de Laboratorio I	Bioquímica y Prácticas de Laboratorio II	Biología Molecular	Genética	Nutriología	Gastroenterología I	Gastroenterología II	Oncología	Neurología I	Neurología II	Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social
Embriología	Neuroanatomía	Sociología	Anestesiología	Inmunología	Imagenología (Radiología y Ultrasonido)	Neumología I	Neumología II	Oftalmología	Geriatria	Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social
Historia y Filosofía de la Medicina)	Educación Ambiental (Ecología)	Psicología y Desarrollo Humano Social e Individual	Introducción a la Cirugía	Reumatología	Infectología	Nefrología I	Nefrología II	Urología		Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social

MATRIZ DE CORRELACIÓN AREAS DE ORGANIZACIÓN DEL MODELO EDUCATIVO Y EJES DE FORMACIÓN ACADÉMICA DEL PROGRAMA EDUCATIVO MEDICO CIRUJANO													
1º Ciclo	2º Ciclo	3º Ciclo	4º Ciclo	5º Ciclo	6º Ciclo	7º Ciclo	8º Ciclo	9º Ciclo	10º Ciclo	11º Ciclo	12º Ciclo	13º Ciclo	14º Ciclo
Lectura y Redacción	Bioética I	Bioética II	Introducción a la Clínica		Salud Pública I	Salud Pública II	Salud Pública III	Salud Pública IV	Salud Pública V	Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social
Habilidades de Pensamiento		Gestión de la Información			Dermatología	Cardiovascular II	Cardiovascular II	Rehabilitación	Patología Quirúrgica	Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social
Computación Básica					Medicina Legal	Medicina Social		Salud Mental II	Urgencias Médico Quirúrgicas	Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social
							S.Generales Anatomo Clínicas I	S.Generales Anatomo Clínicas II	S.Generales Anatomo Clínicas III	Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social
			Metodología Investigación I	Metodología Investig. II	Seminario de Investig a I	Seminario de Invetigación II	Seminario de Investigación III	Medicina Familiar	Medicina Familiar	Inter. Rotat. Pregrado	Inter. Rotat. Pregrado	Servicio Social	Servicio Social
							Optativa	Optativa	Electiva				

MATRIZ DE CORRELACIÓN AREAS DE ORGANIZACIÓN DEL MODELO EDUCATIVO Y EJES DE FORMACIÓN ACADÉMICA DEL PROGRAMA EDUCATIVO MEDICO CIRUJANO													
1º Ciclo	2º Ciclo	3º Ciclo	4º Ciclo	5º Ciclo	6º Ciclo	7º Ciclo	8º Ciclo	9º Ciclo	10º Ciclo	11º Ciclo	12º Ciclo	13º Ciclo	14º Ciclo
Idiomas Inglés	Idiomas Inglés	Idiomas Inglés	Idiomas Inglés	Idiomas Inglés	Idioma Inglés	Idiomas Inglés	Idiomas Inglés	Idioma Inglés	Idiomas Inglés				
	Act. For. Integ	Act. For. Integ	Act. For. Integ	Act. For. Integ	Act. For. Inte	Act. For. Integ	Act. For. Integ						
596 Hrs	556 Hrs	576 Hrs	608 Hrs	560 Hrs	608 Hrs	608 Hrs	588 Hrs	580 Hrs	596 Hrs	250 Hrs	250 Hrs	250 Hrs	250 Hrs
9 U. A. 37 Créditos	8 U.A. 34 Créditos	9 U.A. 35 Créditos	9 U.A. 37 Créditos	8U.A. 34 Créditos	11 U.A. 37 Créditos	11 U.A. 37 Créditos	12 U.A. 36 Créditos	12 U. A 36 Créditos	11 U.A. 37 Créditos	5 Créditos	5 Crédito	5 Crédito	5 Crédito
												Experiencia Recepcional	
												10 Créditos	

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